

REMARKS

The last Office Action of April 9, 2003 has been carefully considered. Reconsideration of the instant application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-11 are pending in the application. No claims have been amended, canceled or added. It is noted for the record that the Examiner's rejection is confusing because it made no reference to pending claims 10 and 11. Accordingly, clarification is requested. A telephone call was placed to the Examiner, who indicated that indeed claims 10 and 11 have been ignored in error, and a next Office Action on the merits, if such becomes necessary, will not be made "final".

Claims 1 and 6 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 3,662,200 (hereinafter "Rank et al.") in view of U.S. Pat. No. 5,473,213 (hereinafter "Kahle, Sr.>").

Claims 2, 3, 7 and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rank et al. in view of Kahle, Sr., and further in view of U.S. Pat. No. 3,590,208 (hereinafter "Martini et al.>").

Claims 4, 5 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rank et al. in view of Kahle, Sr., and further in view of Martini et al., and further in view of common knowledge in the art.

Applicant respectfully disagrees with the Examiner's rejection of the claims 1-9 under 35 U.S.C. §103(a) on the basis of the applied prior art for the

following reasons:

The present invention, as set forth in claims 1 and 6 on file, is directed to an electric motor which has a rotor with a rotor core that is provided with end sheets configured of flat and thin shape and attached respectively to the end face of the laminated rotor core.

The Rank et al. reference discloses a cage rotor having a rotor core (30) in the form of a stack of laminations, wherein the ends of the rotor core have end supports (58, 60) which are made of a high strength metal material. As shown in Fig. 2, the end supports have a three-dimensional shape with recessed portions forming cavities (62, 64) to receive end rings (42, 44) that extend axially from the ends of the rotor core. Unlike the present invention, which sets forth end portions that **match** the shape of the laminations, the end supports have a configuration that does not correspond to the shape of the laminations of the rotor core. This is clearly shown in Fig. 2. In addition, while the end portions according to the present invention are configured as thin, two-dimensional sheets, the end supports of Rank et al. are three-dimensional in structure and thus result in a substantially greater axial extension. For that reason, the end supports of Rank et al. are made of nonmagnetic material (compare col. 3, lines 12 to 14). Clearly, the selected material for the end supports in Rank et al. differs from the magnetic steel material characteristics as taught in the present invention.

The Kahle, Sr. reference describes a rotor assembly which includes a laminated rotor core. Conductive windings (30) are disposed in winding slots (38) and include end turns (54) which extend longitudinally beyond the rotor core and

are supported by end plates (60). As shown in Fig. 1 and described in col. 4, lines 4 to 7, each end plate has a retaining flange of a longitudinal length "l" which is substantially the same or slightly longer than the longitudinal length of the end turns (see also Fig. 4a). Thus, unlike the present invention in which the end sheets are placed in flat engagement to the rotor core and are made thin, i.e. essentially two-dimensional, Kahle, Sr. describes overhanging end turns with end plates of substantial axial dimension.

Moreover, as shown in particular in Figs. 4a, 4b, 4c, the end plates have an L-shaped configuration, i.e. a three-dimensional configuration, similar to the configuration of the end supports of Rank et al.

For the reasons set forth above, it is applicant's contention that neither Rank et al., nor Kahle, Sr., nor a combination thereof teaches or suggests the features of the present invention, as recited in claims 1 and 6.

As for the rejection of the dependent claims, these claims depend on claims 1 and 6, respectively, share their presumably allowable features, and therefore it is respectfully submitted that these claims should also be allowed.

The Examiner further notes that it is common knowledge in the art to select the appropriate materials to make the electric motor a high-speed capable, heavy-duty classified asynchronous motor. Applicant believes that this rejection is improper in the context of the present invention and requests a citation or an Examiner's affidavit that provides such citations. In addition, applicant wishes to note that the problem of using open or closed slots in high-speed asynchronous motors is not disclosed in any way in the Martini reference.

Please note also that it is generally known to the skilled artisan in the field that high-speed motors should meet particular demands and operate at speeds of more than 3000 rpm up to 10,000 rpm and more. It is precisely the provision of the combination, as set forth in claims 1 and 6, that results in a motor configuration that is appropriate for such high-speed operation (compare, e.g. [0004] of the instant specification).

Withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of claim 1 to 11 are thus respectfully requested.

Should the Examiner consider necessary or desirable any formal changes anywhere in the specification, claims and/or drawing, then it is respectfully requested that such changes be made by Examiner's Amendment, if the Examiner feels this would facilitate passage of the case to issuance. If the Examiner feels that it might be helpful in advancing this case by calling the undersigned, applicant would greatly appreciate such a telephone interview.

Respectfully submitted,



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